

ORD RIVER DIVERSION DAM - THE START OF A NEW ERA -



HISTORY OF THE ORD RIVER

EARLY PASTORAL USE

The potential of the East Kimberley Ord River basin was first noted by explorer Alexander Forrest during his exploratory journey through the Kimberley in 1879, during which he named the Ord River after the Governor of Western Australia, Sir Harry Ord. He subsequently set himself up as a land agent and encouraged graziers to take up pastoral leases in the area. The most notable pastoralists to accept the challenge were the Durack, Emanuel and Kilfoyle families. In the first half of 1883 the Duracks and Tom Kilfoyle mustered 7250 head of cattle and 200 horses and left Queensland mid 1883 to drive the cattle 4800 kms overland to the Ord River valley, arriving in September 1885. Less than half the cattle survived the epic journey and were used to stock holdings at Argyle, Lissadell, Rosewood and Newry stations. Ivanhoe station was established some years later. The Emanuels settled in the Fitzroy River valley. However the Duracks and Kilfoyles were not the first settlers in the Ord River valley. Nathaniel Buchanan and Robert Button established the Ord River Station for W H Osmand and J A Pantom in 1884.

AGRICULTURAL RESEARCH

In 1941 the newly appointed Western Australian Director of Works and Buildings, Russell Dumas, was requested by his Minister to make a special study of the north of the state. He was impressed with the potential of the Ord River area to grow crops and he recommended that a small experimental area be established. Later that year the Ord River Experimental Station was set up on the banks of the river at Carlton Reach by Kim Durack, with assistance from the WA Public Works and Agricultural Departments. The Station was later moved to a nearby location on the rich black soil plains and became the Kimberley Research Station, a joint Commonwealth - State venture. After twelve years of research, results indicated that sugar, rice, cotton, safflower and various other oil seeds were likely to succeed if adequate water was available.

PLANNING OF THE IRRIGATION SCHEME

Work then began on preliminary planning of an irrigation scheme to harness the huge volume of water flowing down the Ord during the monsoon (wet) season for the irrigation of the fertile plains along the river's lower reaches to create a food bowl for Western Australia and overseas. Following the Commonwealth Government's 1959 decision to provide funding for the establishment of the town of Kununurra and the construction of the Ord River Diversion Dam and the irrigation channels, detailed planning could proceed with the objective of irrigated farming commencing in 1963. The main dam upstream was completed in 1971 and awarded an Historic Engineering Marker by Engineers Australia in 2004.

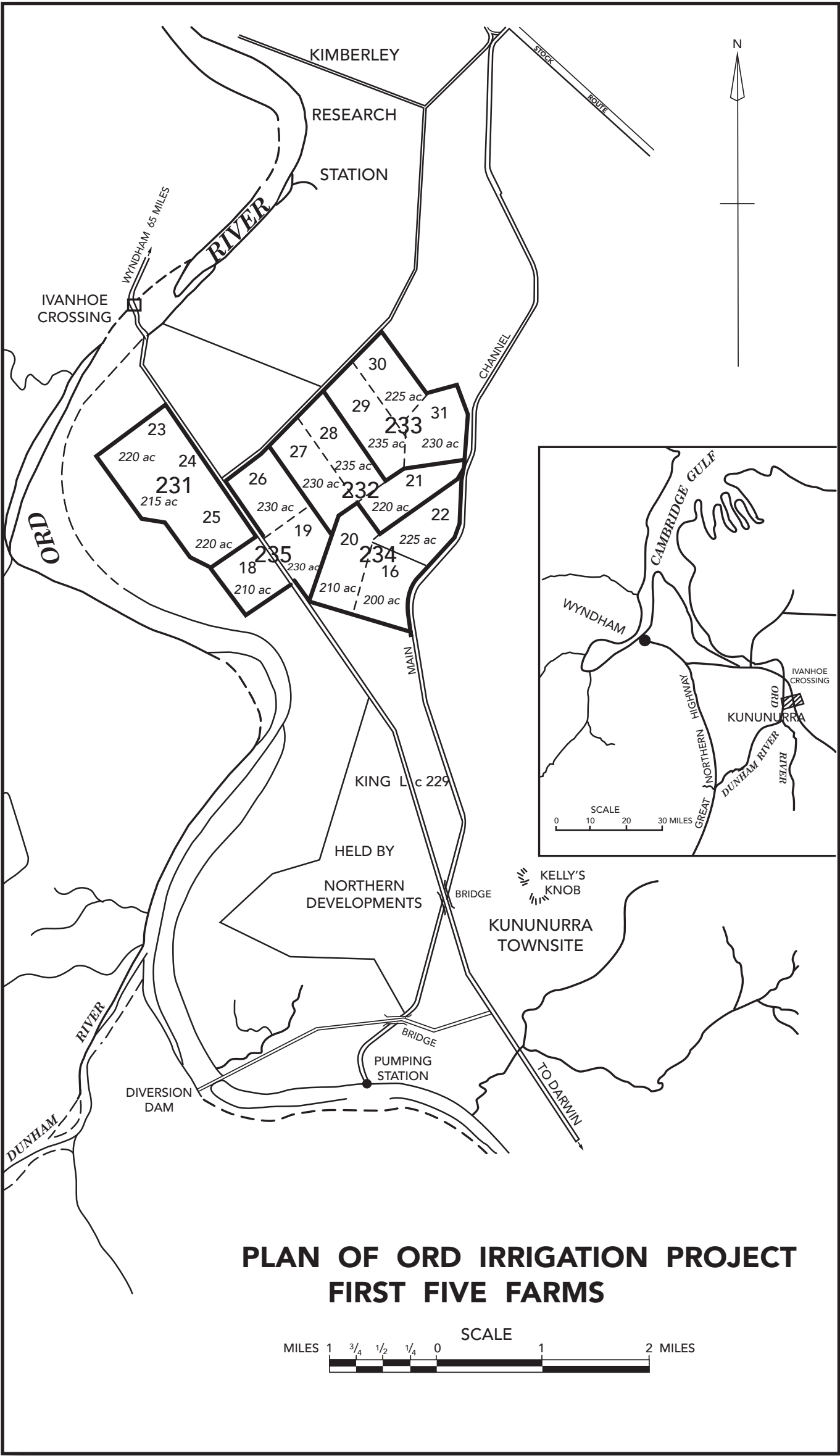


Diagram of First Five Farms, 1959 (PWD WA. redrawn)

BUILDING OF THE DIVERSION DAM

The Public Works Department of WA (PWD) investigations prior to the detailed design of the diversion dam concluded that a maximum flood flow of about 57,000 cubic metres per second could be expected at the proposed site. Fortunately the occurrence of a quartzite bar across the river (Bandicoot Bar), on which the diversion dam could be anchored, was a convenient location to store water to reticulate to the proposed irrigated farm lots.



Bandicoot Bar late 1960, site offices, workshops and concrete plant on east bank. (John Lewis)



Radial gate being raised in 1962. Each gate resists when closed a force of 2500 tonnes of water. (KHS)



East abutment and spillway sections formed ready for concreting after rock excavation, early 1961 (KHS)

Christiani Nielsen Clough, was awarded a \$5.8 million construction contract in July 1960. The dam was ready to store water during the 1962-1963 wet season. Considering the remoteness of the site - 3000 km by mainly unsealed roads from Perth, basic communications facilities, and difficult seasonal climatic conditions, the construction of the diversion dam was a significant technical achievement.



Pier and radial gate construction well advanced mid 1962 (KHS)



Early 1963 showing dam storing water and radial gate painting in progress (KHS)

EMINENT PERSONS ASSOCIATED WITH ORD RIVER DIVERSION DAM



Sir David Brand
Premier of WA
1959 - 1971



Sir Charles Court
Minister for North West, 1959 - 1971
Premier of WA 1974 - 1982



Mr D. C. Munro
Project Engineer, PWD



Mr H. E. Hunt
Construction Mgr, PWD



Mr J. G. Lewis
Engineer for Planning, Design
and Innovation, PWD



Mr R. A. Hamilton
Resident Engineer, PWD



Mr Leif Ott Nilsen, Mgr
Christiani & Nielsen (Aust)

The Ord River Irrigation Project was officially opened by the Prime Minister of Australia, the Rt Hon Sir Robert Menzies, during a commemoration ceremony held on 20 July 1963.



Diversion Dam on 20 July, 1963 (KHS)

An Engineering Heritage Marker was presented to the Water Corporation of Western Australia at a ceremony in Kununurra on 20 July, 2013, the 50th anniversary of the official opening of the Ord Irrigation Project.



For more details of this and other engineering heritage awards, go to
www.engineersaustralia.org.au/heritageregister/search

Photographs from the Kununurra Historical Society (KHS) Archive are from the Cyril Ion, Kevin Richards and Arthur and Dorothy Perry collections, and can be viewed at the Kununurra Museum.

